



## **Second Periodic Review**

Landmark Care Center  
Facility/Site #: 93321516  
Cleanup Site #: 1933  
710 N 39th Avenue  
Yakima, Washington 98902

Prepared by:  
Washington State Department of Ecology  
Central Regional Office  
Toxics Cleanup Program

July 2015

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## 1.0 INTRODUCTION

This document is the Washington State Department of Ecology's second periodic review of post-cleanup site conditions and monitoring data to assure that human health and the environment are being protected at the Landmark Care Center site (Site). The cleanup at this Site was implemented under the Model Toxics Control Act (MTCA), Chapter 173-340 of the Washington Administrative Code (WAC). The first periodic review for this Site was completed in February 2010. This periodic review will evaluate the period from February 2010 through July 2015.

Cleanup activities at this Site were completed through the Voluntary Cleanup Program under VCP No. CE0063. The cleanup actions resulted in residual concentrations of lead and arsenic that exceed MTCA Method A cleanup levels for soil established under WAC 173-340-740(2). As a result of residual contamination, institutional controls were required for the Site to be eligible for a no further action (NFA) determination. WAC 173-340-420(2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- (a) Whenever the department conducts a cleanup action
- (b) Whenever the department approves a cleanup action under an order, agreed order or consent decree
- (c) Or, as resources permit, whenever the department issues a no further action opinion
- (d) And one of the following conditions exists:
  - 1. Institutional controls or financial assurance are required as part of the cleanup
  - 2. Where the cleanup level is based on a practical quantitation limit
  - 3. Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions;
- (b) New scientific information for individual hazardous substances or mixtures present at the Site;
- (c) New applicable state and federal laws for hazardous substances present at the Site;
- (d) Current and projected Site use;
- (e) Availability and practicability of higher preference technologies; and
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

## **2.0 SUMMARY OF SITE CONDITIONS**

### **2.1 Site History**

The Landmark Care Center Site is located in the City of Yakima, Yakima County, Washington. The Site consists of approximately 3.52 acres adjacent to North 39th Avenue between Englewood Avenue and Kern Road. Surrounding land use is a mix of commercial and residential. A financial institution borders the Site to the South, a church borders the Site on the west side of North 40th Avenue to the west, an eye care center borders the property to the north, and a dentist and bank borders the property on the east side of North 39th Avenue to the east. The Chandler House, a previously partnered senior care facility is located on the east side of North 39th Avenue to the southeast of the Site.

The Landmark Care Center Site was historically part of an orchard from sometime before 1939 to sometime after 1977. Prior to remediation and construction activities, there were no historical structures on the subject Site. Orchard trees had been removed from the Site and the Site was overgrown with grasses, weeds, and small shrubs native to the area prior to remediation and construction activities.

A Site plan is available as Appendix 6.1 and a vicinity map is available as Appendix 6.2.

### **2.2 Site Investigation**

In November 1994, Hyatt Centers-Landmark retained Northwest Envirocon Inc. to conduct a Phase I Environmental Site Assessment of the Site. Historical research indicated that the Site had been operated as an orchard for approximately 40 years. The research indicated that the Site contained orchard trees, not agricultural-related buildings or material storage areas. As part of the Phase I investigation Northwest Envirocon, Inc. collected soil samples to be analyzed for lead, arsenic, and organic pesticide concentrations. Analytical results identified residual lead, arsenic, and dichlorodiphenyltrichloroethane (DDT) associated with historic orchard use.

In June 1996, Hyatt Centers-Landmark, Inc. retained Fulcrum Environmental Consulting, Inc. (Fulcrum) to assist in development of a plan for on-site management of soil to be impacted by development and long term use of the Site. In September 1996, Fulcrum conducted Site sampling. Samples were collected at two and four feet below ground surface (bgs).

The conclusion of Site investigations was that contaminant concentrations decrease with depth. Surface contamination was present to a depth of 1 to 4 feet bgs across the majority of the Site. Arsenic, lead, and DDT were detected at maximum concentrations of 163 milligrams per kilogram (mg/kg), 1040 mg/kg, and 0.156 mg/kg, respectively. Two sample locations were found to have concentrations of arsenic exceeding the MTCA Method A cleanup level at a depth

of 4 feet bgs. Additional sampling at these locations indicated that arsenic concentrations were below remedial threshold at 6 feet bgs.

In November 1997, agriculturally impacted soil from the Chandler House site located directly east (across 39th Avenue) of the subject Site was stockpiled on the Landmark Care Center Site. The Chandler House site was originally part of the same orchard and was being developed by the same property owner as the Landmark Site. During Chandler House construction, it was determined that site soils would be relocated off-site in order for driveway and parking elevations to be within acceptable parameters. As a result, 600 to 700 cubic yards of predominately native material were relocated from the Chandler House site to the Landmark Care Center Site. This soil was accommodated within Landmark Care Center Site grading plans and handled the same as on-site near surface impacted soil.

### **2.3 Cleanup Levels and Point of Compliance**

WAC 173-340-704 states that MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used.

MTCA Method A cleanup levels for unrestricted land use were determined to be appropriate for contaminants at this Site. The cleanup actions conducted at the Site were determined to be 'routine', few hazardous substances were found at the Site, and numerical standards were available in the MTCA Method A table for each hazardous substance. The MTCA Method A cleanup levels for arsenic, lead, and DDT are 20 mg/kg, 250 mg/kg, and 1.0 mg/kg, respectively.

For soil, the point of compliance is the area where the soil cleanup levels must be attained. For this Site, the point of compliance is established as soils throughout the Site.

### **2.4 Remedial Actions**

It was determined that onsite management of impacted soil would be the most appropriate remedial action. This option was selected because the contamination was widespread across the Site, and offsite disposal would have been cost prohibitive. Onsite management consisted primarily of using contaminated soils for fill material. In addition, material was contained under barriers such as asphalt pavement, concrete building slab, concrete sidewalk, and soil/vegetative cover.

All media suspected of having residual concentrations of agricultural chemicals could be effectively used onsite for fill material. Preliminary investigations on behalf of the Owner indicated that Site soil should be suitable for compaction. Considering probable duration of historical application of chemicals at this Site (~1930 - 1970), observed depth of maximum downward migration of residual chemicals is consistent with predicted low leachability of metals

in soil. Given the low mobility of chemicals and the distance to groundwater at this Site, managing soils onsite will effectively prevent groundwater impact.

At completion of Site grading and construction, soils not covered by impermeable capping material (asphalt or building footprint) were capped with clean topsoil and vegetation or landscaping. Confirmation of remediation was verified by sampling of surface capping material. Post remediation arsenic analysis documented one area in the upper 6 inches above the selected remedial threshold. Post remediation arsenic statistical analysis had a mean Site value of 7.42 mg/kg, a range of 2.2 to 29.5 mg/kg, and an upper confidence level of 9.73 mg/kg.

## 2.5 Institutional Controls

Because contamination was capped at the Site at concentrations exceeding MTCA Method A Cleanup levels, institutional controls were required for the Site to be eligible for a NFA determination. A NFA determination was issued for the Site in 2000, following remedial actions at the Site. The no further action determination was contingent on the implementation of institutional controls. Institutional controls were not initially implemented at the Site. In 2002, Ecology sent Hyatt Centers – Landmark, Inc. a notice letter indicating that further action would be required at the Site without the implementation of institutional controls.

An environmental covenant was recorded for the Site in 2010. The covenant contains the following restrictions:

1.
  - a. A portion of the Property contains Arsenic, Lead, and dichlorodiphenyltrichloroethane (DDT) contaminated soil located under impermeable surfaces such as a building and associated asphalt areas; or under sod and 6" of clean topsoil in permeable surface areas such as landscaped areas. The Owner shall not alter, modify, or remove the existing structures in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.
  - b. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the capped areas include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork.
2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.
3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or

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create a new exposure pathway, is prohibited without prior written approval from Ecology.

4. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.
5. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.
6. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.
7. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

A copy of the environmental covenant is available as Appendix 6.3.

## **3.0 PERIODIC REVIEW**

### **3.1 Effectiveness of completed cleanup actions**

Clean soil, asphalt, and building structures continue to serve as a cap for the Site and eliminate the direct exposure pathways (ingestion, inhalation, direct contact) to contaminated soils. Based upon the Site visit conducted on July 13, 2015, no repair, maintenance or contingency actions have been required. A photo log is available as Appendix 6.3.

The environmental covenant for the Site was recorded and remains active. There is no evidence that a new document has been recorded that limits the effectiveness or applicability of the covenant. The covenant prohibits activities that will result in the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibits any use of the property that is inconsistent with the covenant. This covenant serves to assure the long term integrity of the cap.

Soils with arsenic, lead, and DDT concentrations higher than MTCA Method A cleanup levels are still present at the Site. However, the cap prevents human exposure to this contamination by ingestion and direct contact with soils. The Restrictive Covenant for the property will ensure that the integrity of the caps will be protected through maintaining the current use of the Site.

### **3.2 New scientific information for individual hazardous substances for mixtures present at the Site**

There is no new pertinent scientific information for the contaminants related to the Site.

### **3.3 New applicable state and federal laws for hazardous substances present at the Site**

There are no new relevant state or federal laws that pertain to contaminants of concern at the Site. Contamination remains at the Site above MTCA Method A cleanup levels and the cleanup action is still protective of human health and the environment.

### **3.4 Current and projected Site use**

The Site is currently used for commercial and residential purposes. There have been no changes in current or projected future Site or resource uses.

### **3.5 Availability and practicability of higher preference technologies**

The remedy implemented included removal/recycling of hazardous substances as well as containment, and it continues to be protective of human health and the environment. While



higher preference cleanup technologies may be available, they are still not practicable at this Site.

### **3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels**

The analytical methods used at the time of the remedial action were capable of detection well below MTCA Method A cleanup levels. The presence of improved analytical techniques would not effect decisions or recommendations made for the Site.

## 4.0 CONCLUSIONS

- The cleanup actions completed at the Site is protective of human health and the environment.
- Soil cleanup levels have not been met at the Site; however, the cleanup action is determined to comply with cleanup standards under WAC 173-340-740(6)(f), since the long-term integrity of the containment system is ensured and the requirements for containment technologies have been met.
- The Restrictive Covenant for the property is in place and will be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant are being followed. No additional remedial actions are required by the property owner. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the cap is maintained.

## 5.0 REFERENCES

Fulcrum Environmental Consulting, Inc. *Report of Voluntary Remedial Action*.  
February 11, 2000.

Ecology. *No Further Action Letter*. May 30, 2000.

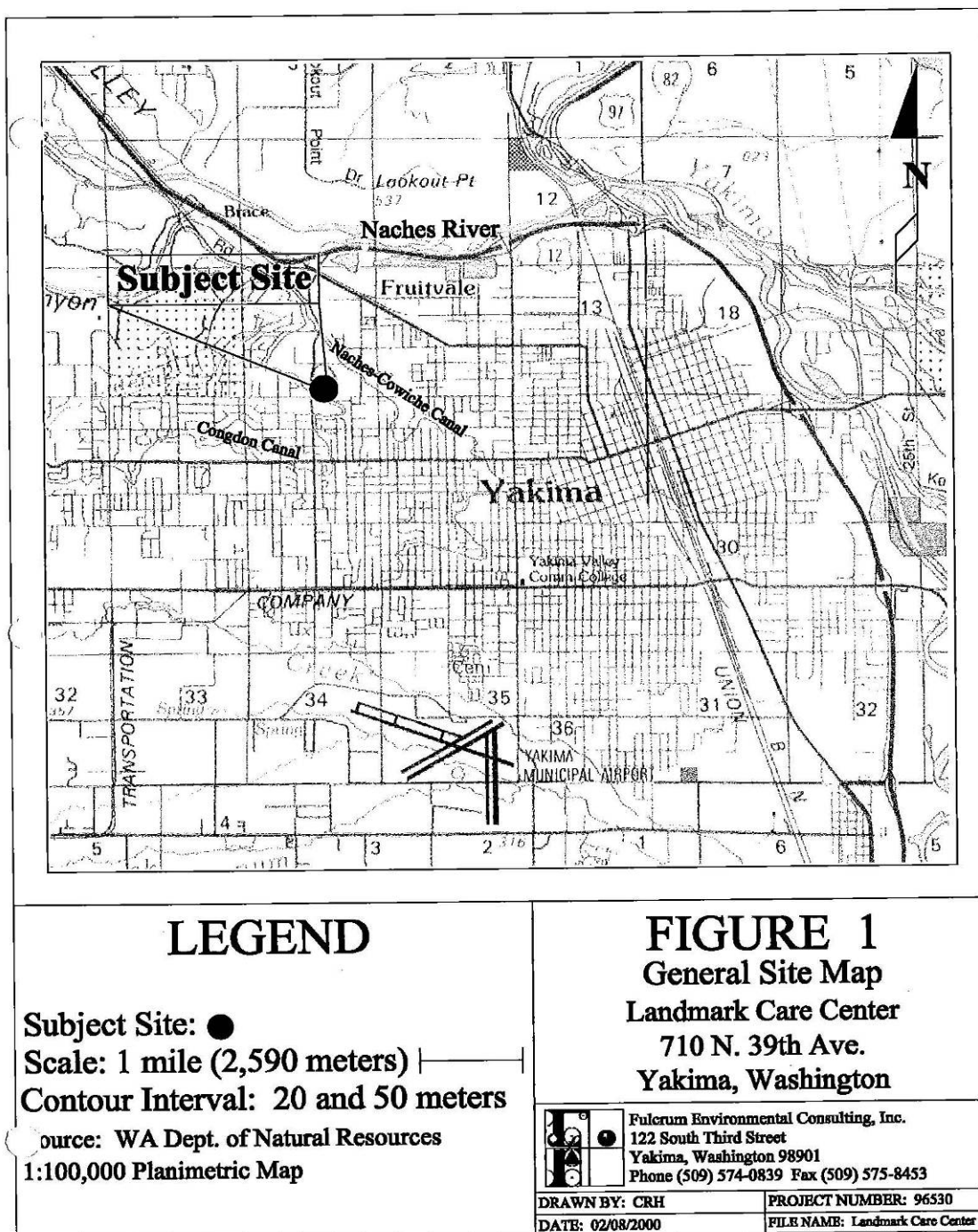
Ecology. *Conditional No Further Action Determination*. September 26, 2002.

Yakima County. *Environmental Covenant*. May 12, 2010.

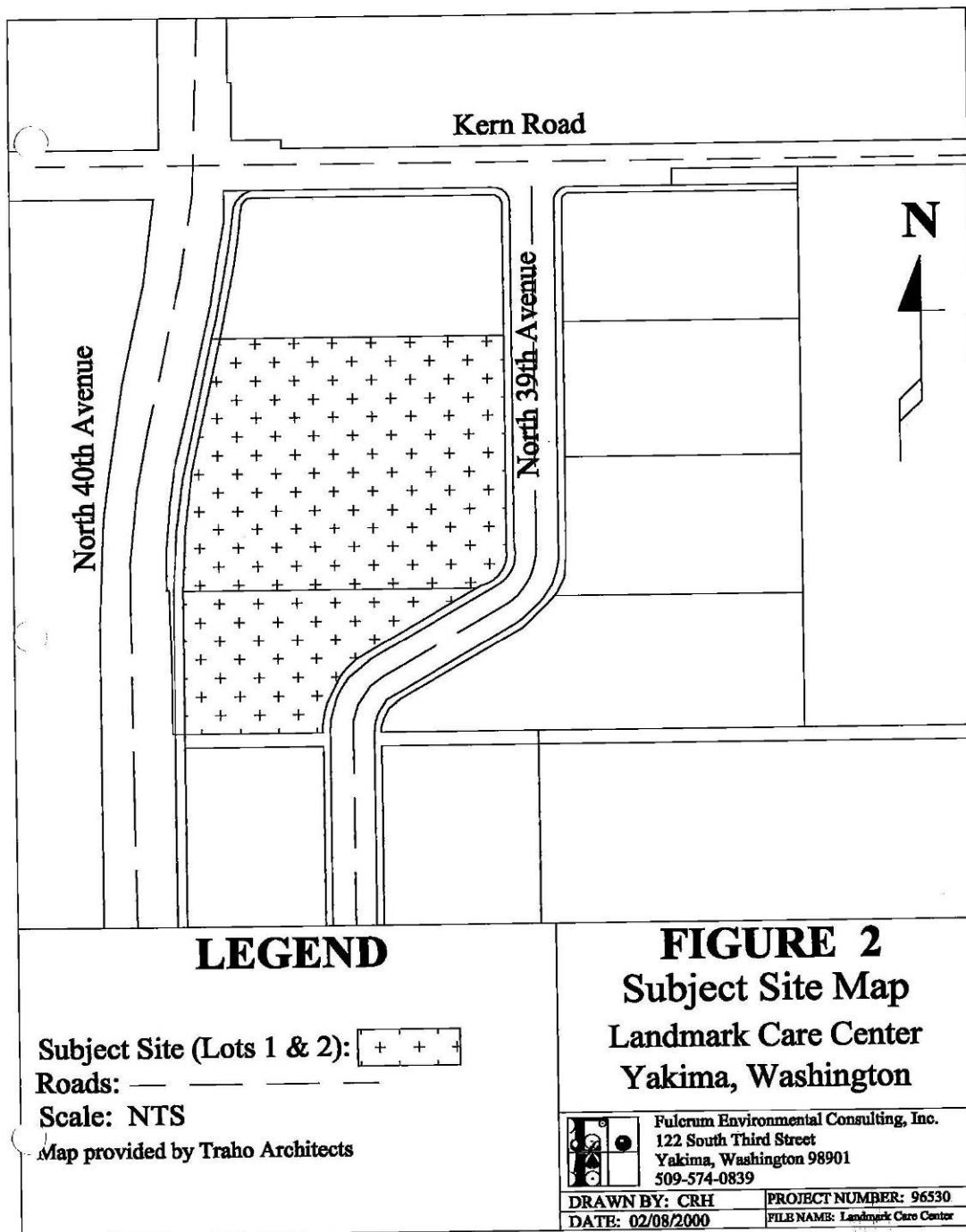
Ecology. *Site Visit*. July 13, 2015.

## **6.0 APPENDICIES**

## 6.1 Vicinity Map



## 6.2 Site Map



## 6.3 Environmental Covenant



**WHEN RECORDED RETURN TO:**

**William F. Almon, P.S.  
218 East "A" Street  
Yakima WA 98901-2692**

FILE# 7691187  
YAKIMA COUNTY, WA  
05/12/2010 10:24:11AM  
COVENANT  
PAGES: 5  
FIDELITY TITLE COMPANY  
Recording Fee: 66.00

<b>DOCUMENT TITLE:</b> Environmental Covenant		MISC
<b>REFERENCE NUMBER(S) OF DOCUMENTS ASSIGNED OR RELEASED:</b> None		
<b>GRANTOR:</b>	Hyattcenters-Landmark, Inc.	
<b>GRANTEE:</b>	State of Washington, Department of Ecology	
<b>LEGAL DESCRIPTION:</b>	Lots 1 and 2 of the Plat of Professional View West, according to the Plat thereof recorded December 19, 1995, under Yakima County Auditor's File No. 3119283.	
<b>TAX PARCEL NUMBER:</b>	181314-43475	

RECEIVED

APR 21 2010

DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE

After Recording Return to:  
Jason Shira  
Department of Ecology  
15 W. Yakima Avenue  
Yakima WA 98902

### Environmental Covenant

**Grantor:** HYATTCENTERS-LANDMARK, INC.

**Grantee:** State of Washington, Department of Ecology

**Legal:** Lot 1 & 2, plat of Professional View West, according to plat filed AF 3119283

**Tax Parcel Nos.:** 181315-43475

**Cross Reference:** N/A

Grantor, HYATTCENTERS-LANDMARK, INC., a Washington corporation, hereby binds Grantor, its successors and assigns to the land use restrictions identified herein and grants such other rights under this environmental covenant ( hereafter "Covenant" ) made this 9th day of April, 2010 in favor of the State of Washington Department of Ecology (Ecology). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, 2007 Wash. Laws ch. 104, sec. 12.

This Declaration of Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by HYATTCENTERS-LANDMARK, INC., its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following documents:



AGRICULTURAL CHEMICAL SOIL OPERATIONS AND MAINTENANCE PLAN  
LANDMARK CARE CENTER, dated February 11, 2000, issued as Project Number Y96530  
by Fulcrum Environmental Consulting, Inc.

These documents are on file at Ecology's Yakima Office.

This Covenant is required because the Remedial Action resulted in residual concentrations of Arsenic, Lead and DDT which exceed the Model Toxics Control Act Method Cleanup Level(s) for SOIL established under WAC 173-340-440.

The undersigned, HYATTCENTERS-LANDMARK, INC., is the fee owner of real property (hereafter "Property") in the County of Yakima, State of Washington, that is subject to this Covenant. The Property is legally described as follows:

Lots 1 and 2 of the plat of Professional View West, according to the Plat thereof recorded December 19, 1995, under Yakima County Auditor's File No. 3119283.

HYATTCENTERS-LANDMARK, INC., makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1.

a. A portion of the Property contains Arsenic, Lead and dichlorodiphenyltrichloroethane (DDT) contaminated soil located Under impermeable surfaces such as a building and associated asphalt areas; or under sod and 6" of clean topsoil in permeable surface areas such as landscaped areas. The Owner shall not alter, modify, or remove the existing structures in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology nor create a new exposure pathway without prior written approval from Ecology.

b. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the capped areas include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.


Section 5. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.

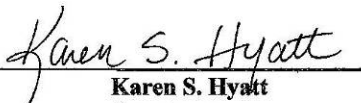
Section 6. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 7. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be of

any further force or effect. However, such an instrument may be recorded only if Ecology,  
after public notice and opportunity for comment, concurs.

**HYATTCENTERS-LANDMARK, INC.**

  
**H. Norman Hyatt**  
**President**

  
**Karen S. Hyatt**  
**Secretary**

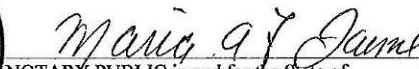
Dated: April 9, 2010

STATE OF WASHINGTON )  
 ) ss.  
County of Yakima )

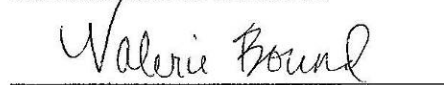
I certify that I know or have satisfactory evidence that H. NORMAN HYATT and KAREN S. HYATT signed this instrument, on oath stated that they were authorized to execute the instrument and acknowledged it as the President and Secretary, respectively, of HYATTCENTERS- LANDMARK, INC., a Washington corporation, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Given under my hand and official seal this 9th day of April, 2010.

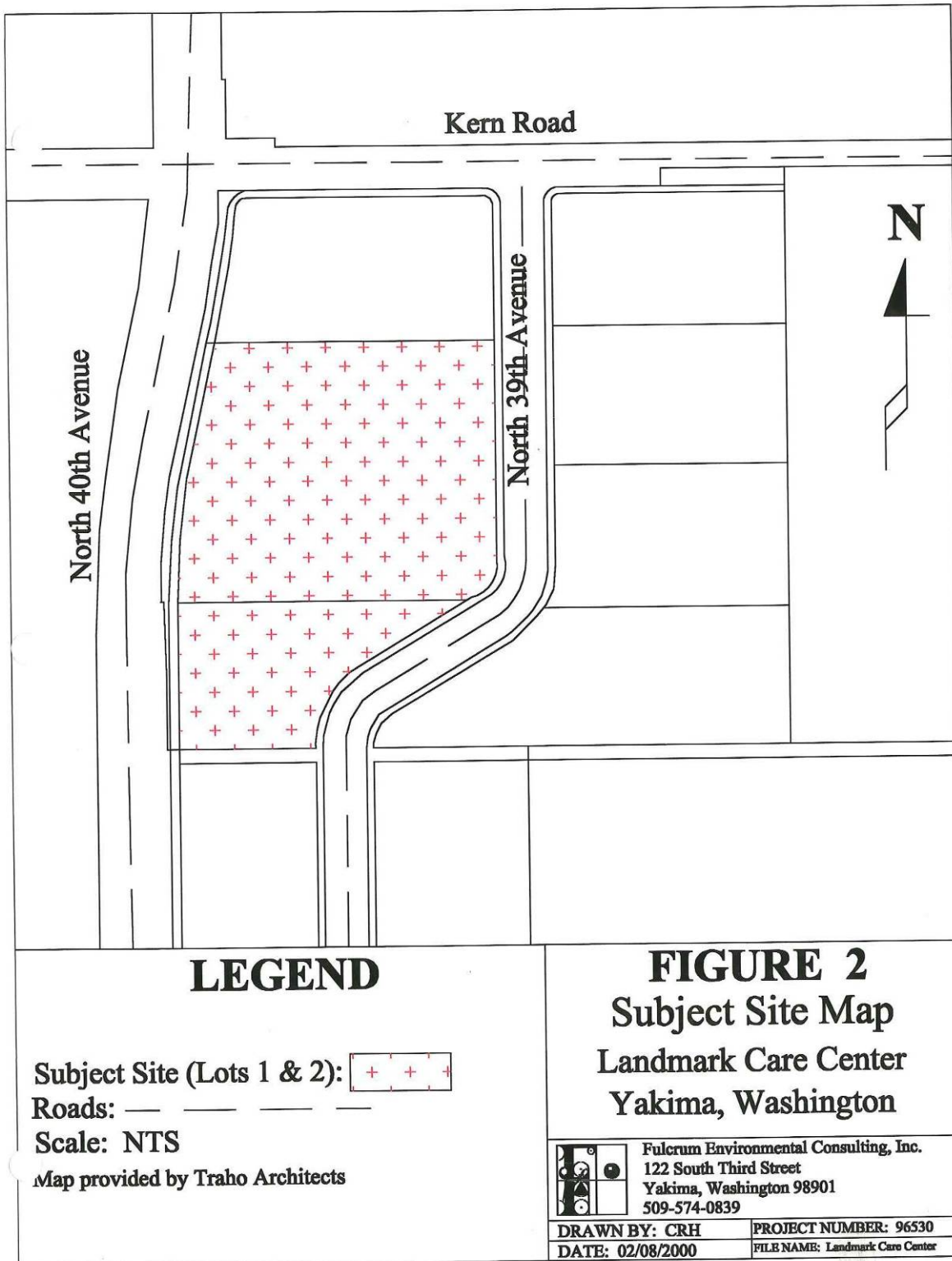


  
NOTARY PUBLIC in and for the State of  
Washington, residing at Yakima.

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

  
**Valerie Bound**  
**Section Manager**

Dated: 5-10-10





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## 6.4 Photo log

**Photo 1: Facility Front Entrance - from the south**



**Photo 2: West Courtyard - from the south**





**Photo 3: Landscaping South of Building - from the east**



**Photo 4: Facility Parking - from south**

